



**Under the Big Sky  
Friday June, 13, 2008**

**The photo above was from MSNBC's Week in Pictures 2-3 years ago, and it was titled "Sticker Shock" as you can see the gas prices reflected in the raindrops. I think at this point, many of us would love to see those prices above again!**

Our weather observers have had a lot of rain to measure and report lately, and I'm willing to bet not one person is complaining about all the great rain recently. Even our friends in moisture starved extreme NE corner of Montana are reporting totals of over an inch! Did you all see that Great Falls had 8" of snow this week too?? All the water has led to many small streams actually running with a good amount of water in them, enough that we had to issue a flood watch for the Milk River below Vandalia Dam for this weekend. Even Fort Peck has risen nearly 4 feet since the start of this month, and the US Army Corps of Engineers expect it to continue rising a few more feet through the 4<sup>th</sup> of July as the snowmelt in the mountains works its way down the river. You can access the latest river gage information (and forecasts for those points we forecast for) by visiting:

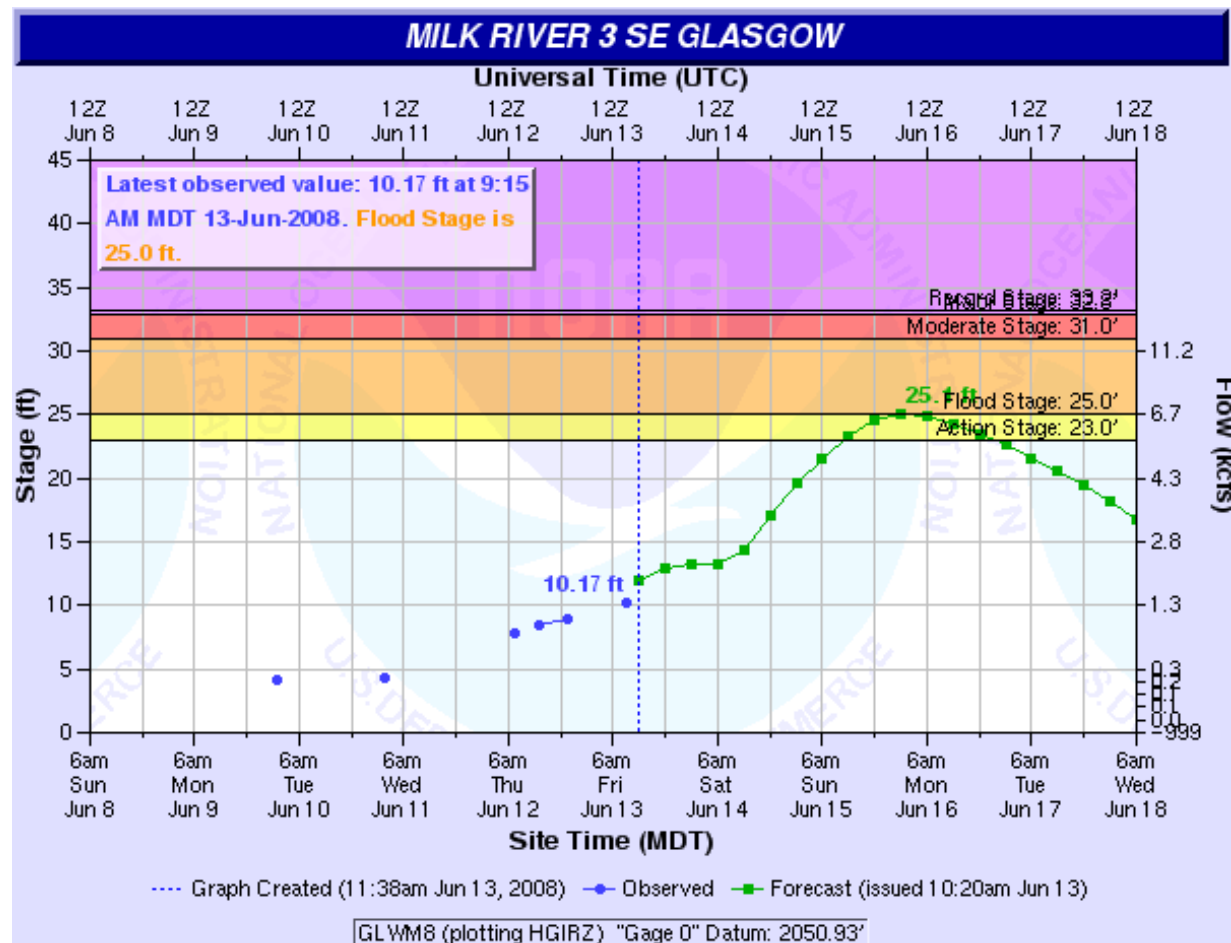
<http://ahps2.wrh.noaa.gov/ahps2/index.php?wfo=ggw> From there, you can even zoom out and see information on the major flooding conditions in the Midwest portion of the United States. The majority of Des Moines, Iowa was evacuated this afternoon due to the major flooding there. The USGS also has real time streamflow information, and sometimes updates a bit quicker than the NWS site does. Information for Montana is available at: <http://water.usgs.gov/waterwatch/?m=real&r=mt>

I'll explain how to understand the information you can view on the NWS Advanced Hydrological Prediction Service pages using today's forecast for the Milk River at Glasgow in the . Here is the URL to see the information, and the hydrograph is shown below:

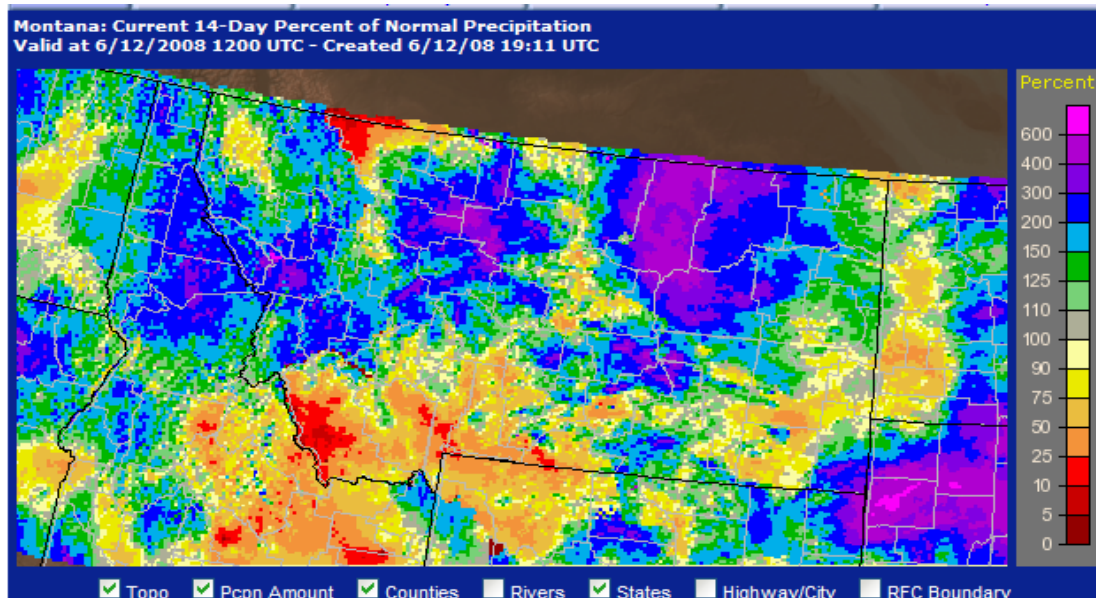
<http://ahps2.wrh.noaa.gov/ahps2/hydrograph.php?wfo=ggw&gage=glwm8&view=1,1,1,1,1,1,1>

1. The current observation is always listed in the top left of the graph. In this one, it is 10.17 feet measured at 9:15 am on the Milk River Highway 24 bridge in Glasgow. We actually manually read the stage at that point. The USGS also has automated gages that are also on the website if they are locations we can issue forecasts for.
2. The blue dots are the observed level on the Milk River.
3. The Green Dots and line are the forecast that come from the Missouri River Basin Forecast Center in Kansas City, MO. They update this every day between 9 am and 11 am. We can request updates as needed as well. You can see that the prediction is that we will reach 25.1 feet (.1 feet above flood stage) around midnight Sunday night/Monday morning.
4. The scale on the left side of the graph is the height of the water or what we call the "Stage"
5. The scale on the right side of the graph is the streamflow in a thousand cubic feet per second, or if you relate it to the predicted crest, it would be about 6,700 cubic feet per second.
6. The Flood Stage at Glasgow is 25 feet. We have set up stages at which we consider "Action Stage" as well as moderate and record floods. To see what a record floods graph looks like, check out the sites in Iowa over the next few days.

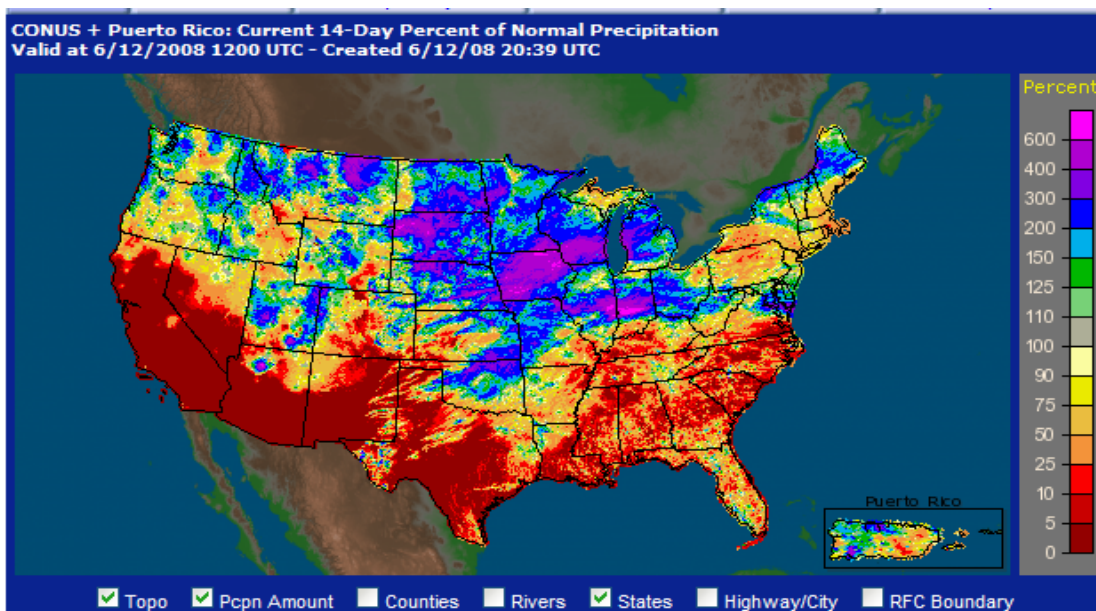
<http://www.crh.noaa.gov/ahps2/index.php?wfo=dmx&view=1,1,1,1,1,1,1&toggles=10,7,8,2,9,15,6>



Here is a look at the Montana precipitation analysis percent of normal for the last 14 days:



For the rest of the United States (percent of normal for the last 14 days):



**Storm Chasing hazards:** A work colleague of my husband's is also storm chaser in South Dakota, and this Wednesday encountered the tornado that killed the four boy scouts in Iowa. The rain was so heavy; they didn't realize they were caught in the tornado. Their vehicle didn't do well through the event, but they are alive, and I'm sure very thankful. To see the video of their ordeal, go to: <http://www.severestudios.com/> and a longer version at: <http://www.msnbc.msn.com/id/21134540/vp/25117840#25117840> You may need to scroll down a bit to get to the 6/11/08 information as they are continually updating this site as this group of chasers go out to document severe storms.

**Heat:** You may have heard about the record heat that occurred across the eastern U.S. (Hard to believe when we were only in the 50s and 60s here this week!) Research has shown that heat waves early on in the season tend to have a higher mortality than even warmer events later in the season. People aren't as acclimatized to the warmth early on in the season as they are by late summer. The three eastern Montana NWS offices will be participating in the evaluation of a heat stress index this summer. It takes into account things such as how many days of heat we've seen, cloud cover and max and minimum temperatures. We will utilize that information in our decision making process for issuing heat warnings and advisories. We are also looking at updating our criteria for heat warnings and advisories, and hopefully we'll have those new criteria to share with you by the next edition of the newsletter.

**Cattle Warning System:** Next week on Wednesday and Thursday, our staff and our university partners are going to be holding a workshop for cattle producers to provide feedback on a proposed Calf Warning System. It will be held twice to give producers several opportunities to provide us with their thoughts. The first one is June 18<sup>th</sup> from 2-5 pm, and the second is June 19<sup>th</sup> from 9 am to noon. If you are interested in attending, please let me know. It will be held at the Fort Peck Fish Hatchery in Fort Peck.

**Lunch with John Pulasky:** I had the pleasure of having breakfast with the Northern Ag Network weatherman John Pulasky this past week while in Billings doing some training. He is very appreciative of all the weather spotters in northeast Montana and the CoCoRaHS observers we have across the state. The Montana NWS offices are also very appreciative that he volunteers as the statewide coordinator for the program as well. Remember, anyone can look at the CoCoRaHS observations. They are available to look at in two locations: <http://www.cocorahs.org/state.aspx?state=mt> and <http://www.weather.gov/data/MSO/MISMSO>

**NOAA Weather Radios coming to an Albertson's near you soon!** The Montana CBS stations are working with Midland Radio and Albertson's stores across the state to promote NOAA Weather Radio throughout this summer, starting next week. You will be able to purchase a radio for \$29.99, which is a savings of \$20 from normal retail price. If you haven't got one, this is a great opportunity to do so. If your local store is out of the radios, please ask them to order some more. The Glasgow store last fall even took a list of names of people who were interested, and called them when they came in, so perhaps the stores in Wolf Point, Glendive and Malta would do the same.

May 1-2 Storm declared a federal disaster: Many of you remember the May 1-2, 2008 storm event that brought heavy rain and some heavy wet snow to portions of eastern Montana. President Bush declared Carter, Custer, Fallon and Power River Counties as disasters. This means that those counties will be able for some assistance as well as funding for hazard mitigation. <http://www.billingsgazette.net/articles/2008/06/13/news/state/26-disaster.txt>



## **NOAA News:**

**National Lightning Safety Awareness Week is June 22-28.** I've already done my speech on lightning safety this year. You can take a look at the lightning safety rules at:

<http://www.wrh.noaa.gov/ggw/pdf/Under%20the%20Big%20Sky%2010.pdf>

The National Weather Service has a lightning page that is available year round. It is at:

<http://www.lightningsafety.noaa.gov/>

**Springtime temperatures and precipitation report:** It was a pretty cool spring across most of the United States, but globally it is the 7<sup>th</sup> warmest spring on record. The only state in the US that was slightly above normal temperature wise from March-May was Texas. To read about the cool US spring, visit:

[http://www.noaanews.noaa.gov/stories2008/20080606\\_ncdcspring.html](http://www.noaanews.noaa.gov/stories2008/20080606_ncdcspring.html)

And the warmth globally:

[http://www.noaanews.noaa.gov/stories2008/20080613\\_springtemp.html](http://www.noaanews.noaa.gov/stories2008/20080613_springtemp.html)

## **NWS Glasgow News:**

Loss of a previous employee: Mel Vaughn, 76, recently passed away from complications from cancer. Although Mel was a Michigan native, the Air Force brought him to Montana where he married Chris Cornwell. In 1959, he took a job at the US Weather Bureau (the old NWS) and worked for us for 28 years before retiring in 1986. Our sympathies go out to his family and friends.

